

## CLAIMS

1. A lithographic projection apparatus for imaging of a mask pattern in a mask onto a substrate provided with a radiation sensitive layer, the apparatus comprising:

an illumination system to supply a projection beam of radiation;

a first object table to hold the mask;

a second object table to hold the substrate;

a projection optical system that images irradiated portions of the mask onto target portions of the substrate;

an object table positioning system constructed and arranged to position at least one of said object tables in a plane, said object table positioning system including:

first and second side-beams having respective first and second sliders mounted thereon;

first and second motors that move said first and second sliders substantially longitudinally along each respective side beam;

a cross-beam mounted proximate first and second ends thereof to said first and second sliders respectively and having a third slider mounted thereto, said cross-beam and said first and second sliders being mounted together;

a third motor that moves said third slider longitudinally along said cross-beam, said third slider being adapted to support said one object table; and,

a thrust bearing pivotally mounted to said first slider, said thrust bearing transmitting a force in said plane and substantially perpendicular to said first side beam between said cross-beam and said first side beam.